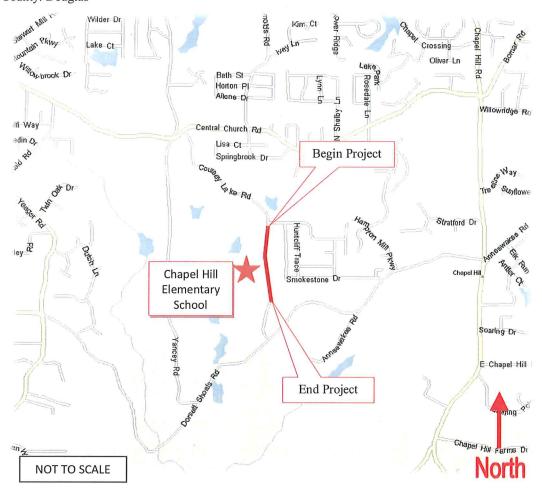
### DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

## PROJECT CONCEPT REPORT \*\*\*SAFE ROUTES TO SCHOOL\*\*\*

County: Douglas P. I. Number: 0009450 Federal Route Number: N/A State Route Number: N/A

	Chapel Hill Ele	ementary School - SRTS
Submitted	d for approval: (Submit to "Concept R	Sean Johnston, Kimley-Horn and Associates, Inc.
		Design Consultant Name and Firm Name
DATE 12	21 2010	2 Bul
Approvals	<b>:</b>	Project Manager
Concur:	Kathen Andul Stage Traffic Engineer	Date: 12.27-10
Approve: _	head Sold	Date: /-5-/U

Project Number: N/A P. I. Number: 0009450 County: Douglas



#### Legend:



#### **Project Location Map**

Project Number: N/A P.I. Number: 0009450 Fulton County, GA

Source: Microsoft Streets & Trips 2006

Chapel Hill Elementary School Safe Routes to School

Project Concept Report Page 3 Project Number: N/A P. I. Number: 0009450

County: Douglas

#### **Need and Purpose:**

This project is a Safe Routes to School (SRTS) infrastructure project that will improve pedestrian and bicycling accessibility for students within a two-mile radius of Chapel Hill Elementary School in Douglas County. The school is located on Coursey Lake Road between the intersections with Planters Walk to the north and Willmington Drive to the south.

The SRTS infrastructure program administered by the Federal Highway Administration is intended to promote walking and bicycling by students living within a two-mile radius of a school. The desired outcomes of the SRTS infrastructure program include increased health and fitness for students, as well as safety and environmental benefits for the community at large.

Over 120 students that attend Chapel Hill Elementary School live within one mile of the school, and over 360 students live within two miles. The school has an enrollment of approximately 800 students. Coursey Lake Road is a two-lane road and has a posted speed limit of 35 miles per hour (mph), except within the school zone, which is posted at 25 mph during school pick-up and drop-off times. Low-density residential land use is adjacent to Chapel Hill Elementary School.

Coursey Lake Road is a two-lane local street with graded shoulders, open drainage ditches and no sidewalks on either side of the road. There are also no clearly marked and signed locations for pedestrians to cross the road near the school site. On the school property, there are no sidewalks connecting the school to Coursey Lake Road. The existing nearby subdivisions, The Plantation at Dorsett Shoals and Knollview at Coursey Lakes, have sidewalks throughout the neighborhoods, but there is currently no pedestrian connectivity between the neighborhoods and the school.

The project will improve accessibility for children walking and biking to Chapel Hill Elementary School through the installation of sidewalks on the east side of Coursey Lake Road from Planters Walk (The Plantation at Dorsett Shoals) to Willmington Drive (Knollview at Coursey Lake). These sidewalks will be 6-feet to 8-feet wide to allow children under the age of 12 the option of walking or bicycling to school. Georgia code states that local jurisdictions such as Douglas County may allow operation of bicycles on sidewalks by persons less than 12 years of age through local ordinance. A sidewalk will be installed on school property to connect from the high visibility crosswalk to the school entry. A bicycle rack will be installed near the school entry for students' use. Parking for 40 bicycles will be provided by installation of 20 inverted-U style bicycle racks on a concrete pad.

The project will also provide a crosswalk at the southern school entrance with high-visibility striping, advance warning signage, and ADA-compliant curb ramps. With traffic volumes of approximately 2000 Average Daily Traffic (ADT) and a posted speed of 35mph on a two-lane facility, this location is considered a candidate site for a marked crosswalk based on FHWA research on the safety effects of marked vs. unmarked crosswalks at uncontrolled locations. Douglas County has reported that over 50 percent of motorists exceed the 35mph posted speed limit, therefore the crosswalk will be supplemented by installation of pedestrian-actuated Rectangular Rapid Flashing Beacons (RRFBs) to alert motorists to the crossing. A raised island

Project Concept Report Page 4 Project Number: N/A P. I. Number: 0009450

County: Douglas

will also be installed to channelize southbound right-turning traffic and provide additional pedestrian refuge at the driveway.

#### Other Projects in the Area:

• Intersection Improvement of Central Church Road at Yancey Road/Coursey Lake Road Realignment (STP00-9398-00(002))

#### Description of the proposed project:

This project involves installation of a sidewalk along Coursey Lake Road from Planters Walk to Wilmington Drive to connect two residential subdivisions to Chapel Hill Elementary School in Douglas County. A sidewalk will also be constructed along the southern school driveway to provide access to the school from Coursey Lake Road. A 6-foot coated chain link fence will be constructed along the sidewalk on school property to provide separation from buses using the driveway, and inverted-U style bicycle racks with capacity for up to 40 bikes will be installed at the sidewalk terminus adjacent to the school building.

This project will also install guardrail aligned with the face of curb along narrow portions of the proposed sidewalk on Coursey Lake Road. Safety hand railing will be installed at the back of sidewalk in areas where vertical drops are located less than 4 feet from the back of sidewalk that exceed 2:1 slope and 30 inches in height. A crosswalk with high-visibility markings and pedestrian actuated Rectangular Rapid Flashing Beacons (RRFBs) will be installed across Coursey Lake Road at the southern school driveway, and additional fluorescent yellow-green school zone signage with flashers and speed indication signs will also be installed. A raised, sixinch concrete island, will be installed to channelize southbound right-turning traffic and provide additional pedestrian refuge at the driveway. A crosswalk with high-visibility markings and ADA-compliant curb ramps will be installed across Willmington Drive at Coursey Lake Road, and the radius in the north east quadrant of the intersection will be modified to shorten the pedestrian crossing.

Minor sections of concrete gravity wall with safety hand railing will also be installed along the east side of Coursey Lake Road where required to avoid right-of-way impacts.

See attachment #4 for project concept layout.

Is the project located in a PM 2.5 Non-attainment area? X Yes No
Is this project located in an Ozone Non-attainment area? X Yes No The project is intended to improve bicycle and pedestrian mobility and will not affect roadway capacity. The project is not required to be included in the conforming plan's model.
PDP Classification: Major (), Minor (X)
Federal Oversight: Full Oversight (), Exempt(X), State Funded(), or Other ()

Project Number: N/A P. I. Number: 0009450 County: Douglas

Functional Classification: \_\_Urban Local Street

U. S. Route Number(s): N/A State Route Number(s): N/A

Traffic (ADT):

Base Year (2010): 1,955 Design Year (2015): 2,160

#### **Existing design features:**

- Existing Typical Section along Coursey Lake Road: One 11' travel lane in each direction, 8'-10' rural grassed shoulders with variable depth (2'-3') ditches
- Posted Speed
  - o Coursey Lake Road: 35 mph
- Width of Right-of-Way

In order to be eligible for Safe Routes to School funding, the local government has demonstrated that adequate existing right-of-way is available to construct the proposed project.

- o Coursey Lake Road: 60 feet
- Major Structures: None
- Major Interchanges or Intersections along the Project: N/A

#### **Proposed Design Features:**

- Proposed Typical Section along Coursey Lake Road: One 11' travel lane in each direction, rural shoulder with ditches (southbound side), urban shoulder with 30" curb and gutter and a 6' wide minimum (8' preferred) sidewalk
- Proposed Design Speed: 35 mph
- Proposed Sidewalk Cross Slope: 2%
- Proposed Crosswalk Width: 8 feet
- Right of way
  - O Easements: Temporary (), Permanent (), Utility (), Other ().
  - O Type of access control: N/A
  - O Number of parcels: 0
  - O Number of displacements:
- o Business: None
- o Residences: None
- O Mobile homes: None
- Other: None

- Structures: N/A
- Major Interchanges or Intersections along the Project: None
- Traffic control during construction: No lane closures are anticipated along Coursey Lake Road.

Project Number: N/A P. I. Number: 0009450 County: Douglas

Design Exceptions to controlling criteria anticipated:

	<u>UNDETERMINED</u>	<b>YES</b>	<u>NO</u>
HORIZONTAL ALIGNMENT:	()	()	(X)
ROADWAY WIDTH:	()	()	(X)
SHOULDER WIDTH:	()	()	(X)
VERTICAL GRADES:	()	()	(X)
CROSS SLOPES:	()	()	(X)
STOPPING SIGHT DISTANCE	: ()	()	(X)
SUPERELEVATION RATES:	()	()	(X)
HORIZONTAL CLEARANCE:	()	()	(X)
SPEED DESIGN:	()	()	(X)
VERTICAL CLEARANCE:	()	()	(X)
BRIDGE WIDTH:	()	()	(X)
BRIDGE STRUCTURAL CAPA	CITY: ()	()	(X)
LATERAL OFFSET TO OBSTR	CUCTION: ()	()	(X)

- Design Variances: None Anticipated
- Environmental concerns: None Anticipated
- Level of environmental analysis:
  - O Are Time Savings Procedures appropriate? Yes (X), No (),
  - O Categorical exclusion: Anticipated
  - O Environmental Assessment/Finding of No Significant Impact(FONSI): ()
  - O Environmental Impact Statement (EIS) ( ).
- Utility involvements:
  - O Utility facilities located within the project limits include:
    - Gas (Atlanta Gas Light)
    - Power (Georgia Power)
    - Water (Douglas County)
    - Telecommunications (AT&T, Comcast, Verizon)

VE Study Required:

Yes ()

No (X)

Benefit/Cost Ratio: N/A .

**Project Cost Estimate and Funding Responsibilities:** 

	PE	ROW	UTILITY	CST*	MITIGATION
By Whom	GDOT	N/A	N/A	GDOT	N/A
\$ Amount	\$65,000.00	N/A	N/A	\$477,232.64	N/A

<sup>\*</sup>CST Cost includes: Construction, and Engineering and Inspection.

Project Number: N/A P. I. Number: 0009450 County: Douglas

#### **Project Activities Responsibilities:**

- Design: Consultant/GDOT
- Right-of-Way Acquisition: N/A
- Right-of-Way funding (real property): N/A
- Relocation of Utilities: GDOT/Affected Utility Owners
- Letting to contract: GDOT
- Supervision of construction: GDOT
- Providing material pits: Contractor
- Providing detours: N/A
- Environmental Studies/Documents/Permits: Consultant/GDOT
- Environmental Mitigation: GDOT

#### Coordination

- Concept Meeting date and brief summary: 05/18/2010 Minutes Attached
- P. A. R. meetings, dates and results: None Required
- FEMA, USCG, and/or TVA: N/A
- Public involvement: N/A
- Local government comments: N/A
- Other projects in the area:
  - O Intersection Improvement of Central Church Road at Yancey Road/Coursey Lake Road Realignment (STP00-9398-00(002))
- Other coordination to date: N/A

Sc	heduling – Responsible Parties' Estimate	Anticipated T	ime Frame
•	Time to complete the environmental process:	Begin: 4/10	End: 3/11
•	Time to complete preliminary construction plans:	Begin: 10/10	End: 5/11
•	Time to complete right-of-way plans:	Begin: n/a	End: n/a
•	Time to complete the Section 404 Permit:	Begin: n/a	End: n/a
•	Time to complete final construction plans:	Begin: 5/11	End: 8/11
•	Time to complete the purchase of right-of-way:	Begin: n/a	End: n/a
•	List other major items that will affect the project schedule:	Begin: n/a	End: n/a

Alternates considered: (1) Install sidewalks along the east side of Coursey Lake Road from Planters Walk to Wilmington Drive in order to connect two residential subdivisions to Chapel Hill Elementary School in Douglas County. A high visibility crosswalk with pedestrian-actuated Rectangular Rapid Flashing Beacons will be installed at the southern school driveway. A sidewalk will also be constructed along the southern school driveway to provide access to the school from Coursey Lake Road. A fence will be constructed along the sidewalk on school property to provide separation from buses using the driveway, and bicycle racks will be installed at the sidewalk terminus adjacent to the school building.

(2) Install improvements as described in Alternative 1, in addition to a marked crosswalk at the northern school driveway as well as the southern school driveway.

Project Number: N/A P. I. Number: 0009450 County: Douglas

(3) Install sidewalks along the west side of Coursey Lake Road from Planters Walk to Wilmington Drive in order to connect two residential subdivisions to Chapel Hill Elementary School in Douglas County. A high visibility crosswalk with pedestrian-actuated Rectangular Rapid Flashing Beacons will be installed each of the neighborhood intersections to provide crossing for children to get to the west side of Coursey Lake Road. A sidewalk will also be constructed along the southern school driveway to provide access to the school from Coursey Lake Road. A fence will be constructed along the sidewalk on school property to provide separation from buses using the driveway, and bicycle racks will be installed at the sidewalk terminus adjacent to the school building.

(4) No Build.

#### Comments:

#### **Comparison Summary of Alternates 1-4**

Alternate (1) is recommended for this concept.

Alternate (2) is not recommended for this concept. A crosswalk at this location is located near the crest of a vertical curve that would create sight-distance issues for school children crossing the road. Children that would potentially cross at this location would be forced to cross another vehicle driveway on school property. Also, a crossing at this location would create multiple crossings on Coursey Lake Road, and it is preferred to consolidate crossings of Coursey Lake Road to one location.

Alternate (3) is not recommended for this concept because this alternate would require two crossings of Coursey Lake Road. Two crosswalks would create more exposure of schoolchildren crossing the road, while consolidating crossings to one location at the southern school driveway would provide a more uniform crossing.

Alternate (4) is not recommended for this concept. The no-build alternate would not promote safe walking and bicycling for children attending Chapel Hill Elementary School, as stated in the project need and purpose.

#### **Attachments:**

- 1. Construction Cost Estimate
- 2. Concept Team Meeting Minutes (05/18/2010)
- 3. Concept Layout
- 4. Typical Sections

STATE HIGHWAY AGENCY

DATE : 11/10/2010 PAGE : 1

JOB ESTIMATE REPORT

JOB NUMBER : 0009450\_SPJ SPEC YEAR: 01 DESCRIPTION: CHAPEL HILL ELEMENTARY SCHOOL SRTS

# COST GROUPS FOR JOB 0009450\_SPJ

EARTHWORK (LS) GUARDRAIL/PARRIER (LF) EROSION COUTROL (SY) DRAINAGE (LF) THERWO PLASTIC LINEAR PAVEMENT MARKING CONCRETE (SY) CORE & GUTTER (LF) TRAFFIC CONTROL-TEMPORARY (LS) DRAINAGE (EA) FENCES (LF) REVOYALS (LE) REVOYALS (LS) REVOYALS (LS) RESOVALS (LS)	ERTHLE   EARTHWORK (LE)	CO31 GEOOF	COST GROUP DESCRIPTION	QUANTITY	PRICE	AMOUNT	AMOUNT ACTIVE?
	GUARDRAIL/PARRIER (LF) EROSION COWTROIL (SY) DRAINAGE (LE) THERWO PLASTIC LINEAR PAVEMENT MARKING CONCRETE (SY) CURE & GUTTER (LF) TRAFFIC COWTROIL-TEMPORARY (LS) DRAINAGE (EA) FENCES (LE) REMOVALS (LS) OBSOLETE PAVEMENT MARKING SMALL ROADSIDE SIGNS STRUCTURES, OTHER (SF) NON-ROADWAY (LS)	ERTHLS	EARTHWORK (LS)		 		>+
	EROSION CONTROL (SY) DRAINAGE (LE) THERMO PLASTIC LINEAR PAVEMENT MARKING CONCRETE (SY) CURE & GUTTER (LF) TRAFFIC CONTROL-TEMPORARY (LS) DRAINAGE (EA) ERNCS (LS) ORSOLETE PAVEMENT MARKING SMALL ROADSIDE SIGNS STRUCTURES, OTHER (SF) NON-ROADWAY (LS)	GDRL	GUARDRAIL/BARRIER (LF)				×
	DRAINAGE (LF) THERMO PLASTIC LINEAR PAVEMENT MARKING CONCRETE (SY CURE & GUTTER (LF) TRAFFIC CONTROL-TEMPORARY (LS) DRAINAGE (EA) FENCES (LF) REWOVALS (LS) OBSOLETE PAVEMENT MARKING SWALL ROADINGY (LS) NON-ROADINGY (LS)	EROC	EROSION CONTROL (SY)				X
	THERWO PLASTIC LINEAR PAVEMENT MARKING CONCRETE (SY) CURE (SY) CURE (LE) TRAFIC CONTROL-TEMPORARY (LS) DRAINAGE (EA) FENCES (LS) ORSOLETE PAVEMENT MARKING SMALL ROADSIDE SIGNS STRUCTURES, OTHER (SF) NON-ROADMAY (LS)	DRNGLE	DRAINAGE (LF)				×
	CONCRETE (SY) CURE & GUTTER (LF) TRAFFIC CONTROL-TEMPORARY (LS) DRAINAGE (RA) FENDES (LF) REMOVALS (LF) OBSOLETE PAVEMENT MARKING SMALL ROADOSIDE SIGNS STRUCTURES, OTHER (SF) NON-ROADWAY (LS)	THSL	THERMO PLASTIC LINEAR PAVEMENT MARKING				×
	CURE & GUTTER (LF) TRAFFIC COWINGL-TEMEORARY (LS) DRAINAGE (EA) FENCES FENCES (LE) REMOVALS (LS) OBSOLETE PAVEMENT MARKING SMALL ROADSIDE SIGNS STRUCTURES, OTHER (SF) NON-ROADMAY (LS)	CONC	CONCRETE (SY)				×
	TRAFFIC CONTROL-TEMPORARY (LS) DRAINAGE (EA) FENCES (LF) REMOVALS (LS) OBSOLETE PAVEMENT MARKING SMALL ROADSIDE SIGNS STRUCTURES, OTHER (SF) NON-ROADWAY (LS)	CURB	CURB & GUTTER (LF)				×
	DRAINAGE (EA) FENDES (I.F.) REMOVALS (I.S.) OBSOLETE DAVENENT MARKING SMALL ROADSIDE SIGNS STRUCTURES, OTHER (SF) NON-ROADMAY (I.S.)	TRFT	TRAFFIC CONTROL-TEMPORARY (LS)				×
	FENCES (LF) REMOVALS (LS) OBSOLETE PAVEMENT MARKING SMALL ROADSIDE SIGNS STRUCTURES, OTHER (SF) NON-ROADWAX (LS)	DRNGEA	DRAINAGE (EA)				×
	REMOVALS (LS) OBSOLETE PAVEMENT MARKING SMALL ROADSIDE SIGNS STRUCTURES, OTHER (SF) NON-ROADSWAX (LS)	FENC	FENCES (LF)				X
	OBSOLETE PAVEMENT MARKING SMALL ROADSIDE SIGNS STRUCTURES, OTHER (SF) NON-ROADSMAX (LS)	RMVL	REMOVALS (LS)				×
	SMALL ROADSIDE SIGNS STRUCTURES, OTHER (SF) NON-ROADMAY (LS)	XPMK	OBSOLETE PAVEMENT MARKING				×
	SIRUCTURES, OTHER (SF) NON-ROADWAY (LS)	SSGN	SMALL ROADSIDE SIGNS				×
	NON-ROADWAY (LS)	STRO	STRUCTURES, OTHER (SF)				×
		NONR	NON-ROADWAY (LS)				×
ACTIVE COST GROUP TOTAL 0.00		INFLATED CO	INFLAMEN COST CROSS TOWARD			0	

## ITEMS FOR JOB 0009450\_SPJ

1	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
		* * * * * * * * * * * * * * * * * * * *	CONSTRUCTION ENGR INSPECTION 5%	1.000	22725.36	22725.36
141-6222		LF	CONC CURE & GUTTER/ 8"X30"TP2	2156.000	27.00	58212.00
63-0232		AC	TEMPORARY GRASSING	1.000	800.00	800.00
65-0030		LF	MAINT OF TEMP SILT FENCE, TP C	1320.000	2.00	2640.00
71-0030		LF	TEMPORARY SILT FENCE, TYPE C	2640.000	4.00	10560.00
0169-00		AC	PERMANENT GRASSING	1.000	1235.00	1235.00
41-0104		SY	CONC SIDEWALK, 4 IN	1780.000	45.00	80100.00
441-0748		SY	CONC MEDIAN, 6 IN	41.000	77.00	3157.00
50-1180		LF	STM DR PIPE 18", H 1-10	750.000	43.00	32250.00
210-0100		LS	GRADING COMPLETE - 0009450	1.000	20000.00	20000.00
500-3101		CY	CLASS A CONCRETE	90.000	502.72	45245.14
515-2020		LF	GALV STEEL PIPE HDRAIL, 2", ROUD	487.000	47.27	23021.38
541-1100		LF	GUARDRAIL, IP I	1185.000	50.00	59250.00
541-5001		EA	GUARDRAIL ANCHORAGE, TP 1	2.000	648.00	1296.02
341-5012		EA	GUARDRAIL ANCHORAGE, TP 12	2.000	2000.00	4000.00
553-1804		LF	THERM SOLID TRAF STRIPE, 8", WH	320.000	2.00	640.00
50-1000		LS	TRAFFIC CONTROL - 0009450	1.000	10000.00	10000.00
68-1100		EA	CATCH BASIN, GP 1	5.000	2900.00	14500.00
43-2152		LF	CH FEN, W/X ARM/EWIRE, ZC, 6', 9GA	376.000	17.00	6392.00
510-0355		LF	REM CONC CURB & GUITER ALL SIZ	13.000	11.00	143.00
10-4170		CY	REM ASPH PVMT, INCL BASE	75,000	50.00	3750.00
553-1704		LF	THERM SOLID TRAF STRIPE, 24", WH	23.000	5.00	115.00
			STATE HIGHWAY AGENCY			

DATE : 11/10/2010 PAGE : 2

RT	
REPO	
ESTIMATE	
JOB	

0100 636	636-1033	SF	HWY SIGNS, TPIMAT, REFL SH TP 9	24.000	21.91	525.92
0105 636	636-2070	LF	GALV STEEL POSTS, TP 7	24.000	10.16	243.92
0110 200	500-3201	CX	CL B CONC, RET WALL	120.000	533.42	64010.80
0115 754	754-6000	EA	BICYCLE RACK	2.000	975.00	1950.00
0120 647	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 1	1.000	10000.00	10000.00
			(RRFB'S)			
0125 550-1240	550-1240	LF	STM DR PIPE 24",H 1-10	10.000	47.01	470.10
ITEM TOTAL	ITEM TOTAL INFLATED ITEM TOTAL				477232.63	
				÷		
TOTALS FOR JOB C	TOTALS FOR JOB 0009450_SPJ					
ESTIMATED COST:	COST:				477232.64	1
CONTINGEN	CONTINGENCY PERCENT ( 0.0 ):	: `			00.00	
ESTIMATED TOTAL:	TOTAL:				477232 64	

#### **MEETING MINUTES**

Date:

May 18, 2010

Project:

Safe Routes to School Infrastructure Projects

GDOT Project No.:

PI 0009450

County:

Douglas

Subject:

**Concept Team Meeting** 

Attendees:

**Charity Belford** 

Georgia Department of Transportation (GDOT)

Emmanuella Myrthil

**GDOT** 

Gary Westmoreland

Douglas County Department of Transportation (DCDOT)

Keary Lord

DCDOT

Randy Hulsey

**DCDOT** 

Kirk Nicholson

Douglas County Schools

Yvonne Kidney

Douglas County Schools
GDOT Safe Routes to School Resource Center

Alicia Hatcher Sarah Knight

GDOT Safe Routes to School Resource Center

Stuart Day

Kimley-Horn and Associates (KHA)

Sean Johnston

KHA

John Cock

Alta Planning + Design (Alta)

This Safe Routes to School concept team meeting was held on Tuesday, May 18, 2010 at Chapel Hill Elementary School and in the vicinity of the school in Douglasville, Georgia to discuss the sponsor's application and concepts for proposed infrastructure improvements in the vicinity of the school. The proposed project consists of sidewalk and intersection modifications to improve conditions for children walking and bicycling to school.

The meeting began with a group discussion at the school, which included the following key items:

- KHA gave an overview of plan development process milestones, which include concept development (i.e. 30% design), environmental documentation, construction drawing preparation (including a Final Field Plan Review at 90% design), and letting to construction. It is GDOT and KHA's goal to complete this process within two years, with six to nine months expected for construction. This is an expedited timeframe for a process that could normally take three to six years.
- KHA gave an overview of the design teams' understanding of the project. The scope entails constructing sidewalks along the east side Coursey Lake Road from the Knollview subdivision (Willmington Drive) to the Plantation subdivision (Planters Walk), a crossing at the southern most school entrance, and a path from Coursey Lake Road to the school. Following the path on school property, a chain-link fence will be installed to keep children separated from internal traffic. A bicycle rack will be installed near the school along the path.
- Douglas County representatives informed KHA that the goal was for the sidewalk to be as wide as possible, in order to accommodate bicycle use by children under 12 years old.

- Another goal was to provide separation between the children walking to school and vehicle traffic.
   T-beam guardrail was included in the sponsor's application and cost estimate, but other
   alternatives, such as a low berm or low plantings, were discussed in order to reduce costs. One
   critical area to have guardrail is at the northern school entrance driveway, to discourage children
   from crossing at this location.
- The proposed crosswalk will be mitigated with signage and pedestrian activated beacons.
- Douglas County intends to coordinate with Georgia Power to install luminaries on existing utility poles after the SRTS infrastructure project is constructed.

The group then performed a site walk along the proposed project limits. Multiple options for improvements within the project limits were discussed. This discussion resulted in the following recommendations:

- It was suggested to consider covered bike racks near the school building to shield bikes from the elements.
- The path along the school property should follow the shortest route that meets ADA guidelines.
  - If ADA grades are not met, switchbacks will be provided.
- It was suggested to consider replacing the striped right-turn channelization island at the southern school driveway with a raised island in order to reduce crossing distances and provide refuge for pedestrians.
- Willmington Drive at Coursey Lake Road
  - The curb and gutter along the north side of Willmington Drive will be revised to tie to the proposed curb and gutter along Coursey Lake Road.
  - o The curb ramps at Willimington Drive will be improved as part of this project.
  - The stop bar for Willmington Drive will be restriped in the current location, with a crosswalk provided one passenger car length behind the stop bar to provide for pedestrian crossings while maintain sight distance for vehicles exiting the subdivision.
- Planters Walk
  - The stop bar for Planters will be restriped in the current location, with a crosswalk provided one passenger car length behind the stop bar to provide for pedestrian crossings while maintain sight distance for vehicles exiting the subdivision.
- Retaining walls and storm drainage will be required at various locations. Specific locations will be determined during the plan development process.

Other programmatic items were discussed to supplement the SRTS infrastructure improvements. These include:

- Training of a crossing guard for use at the proposed crosswalk location.
- Verification of a local statute or ordinance that allows for children under 12 years old to ride bicycles on the sidewalk.
- Neighborhood walking/biking school buses, led by parent or PTO representatives
- Future connections between subdivisions that are currently divided by cul-de-sacs.

These minutes contain the understanding of KHA and Alta representatives regarding discussions, decisions, action items, etc. at the meeting.

